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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/477,764	01/04/00	JAN	C 042390.P5488

DARREN J MILLIKEN  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
7TH FLOOR  
12400 WILSHIRE BOULEVARD  
LOS ANGELES CA 90025

MMC:2/0717

*An*  
EXAMINER

VU, H

ART UNIT	PAPER NUMBER
2811	

DATE MAILED: 07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>09/477,764</b>	Applicant(s) <b>JAN ET AL.</b>
	Examiner <b>HUNG VU</b>	Art Unit <b>2811</b>

*– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on May 8, 2001

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 8, 10-12, and 14 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 8, 10-12, and 14 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892)

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

20)  Other: \_\_\_\_\_

Art Unit: 2811

## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on 05/08/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/477,764 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8, 10-12, and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsumoto et al. (PN 5,726,479, of record).

Matsumoto et al. discloses a gate electrode formed on a substrate comprising, a gate layer (4) disposed above a substrate (1); thin first spacers (5) disposed adjacent to opposite sides of the gate layer wherein the thin first spacers have approximately the same height as the gate layer;

Art Unit: 2811

thick second spacers (36) disposed adjacent to each of the thin first spacers, the thick second spacers comprising nitride, wherein the thick second spacers have approximately the same height as the gate layer;

a conductive layer (9a) disposed over the gate layer, the conductive layer extending beyond edges of the gate layer. Note Figures 1-3 (especially Figure 3) of Matsumoto et al..

With regard to claim 10, Matsumoto et al. discloses wherein the gate layer comprises polysilicon.

With regard to claim 11, Matsumoto et al. discloses wherein the conductive layer comprises polycide.

With regard to claim 12, Matsumoto et al. discloses wherein the thin first spacers comprise oxide;

With regard to claim 14, Matsumoto et al. discloses wherein the polycide comprises titanium salicide ( $TiSi_2$ ).

3. Claims 8, 10-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (PN 5,290,720, of record).

Chen discloses a gate electrode formed on a substrate comprising,  
a gate layer (13,23) disposed above a substrate (1);

Art Unit: 2811

thin first spacers (25) disposed adjacent to opposite sides of the gate layer wherein the thin first spacers have approximately the same height as the gate layer;

thick second spacers (31) disposed adjacent to each of the thin first spacers, the thick second spacers comprising nitride, wherein the thick second spacers have approximately the same height as the gate layer;

a conductive layer (33) disposed over the gate layer, the conductive layer extending beyond edges of the gate layer. Note Figure 4 of Chen.

With regard to claim 10, Chen discloses wherein the gate layer comprises polysilicon.

With regard to claim 11, Chen discloses wherein the conductive layer comprises polycide.

With regard to claim 12, Chen discloses wherein the thin first spacers comprise oxide;

With regard to claim 14, Chen discloses wherein the polycide comprises titanium salicide ( $TiSi_2$ ).

***Response to Arguments***

4.     Applicant's arguments filed 04/12/01 have been fully considered but they are not persuasive.

Art Unit: 2811

It is argued, at page 4 of the Remarks, that Matsumoto et al. does not disclose both the thin first spacers (5) and the thick second spacers (7a) have approximately the same height as the gate layer (4a). This argument is not convincing because Matsumoto et al. clearly discloses, as shown in Figure 3, that both the thin first spacers (5) and the thick second spacers (7a) have approximately the same height as the gate layer (4a). Therefore, Applicants' claim 8 does not distinguish over the Matsumoto et al. reference.

It is argued, at page 4 of the Remarks, that Chen does not disclose the thick second spacers comprise nitride. This argument is not convincing because Chen clearly discloses, as shown in Figure 4 and Col. 3, lines 59-61, that the thick second spacers (31) comprise nitride. Therefore, Applicants' claim 8 does not distinguish over the Chen reference.

### *Conclusion*

5. Papers related to this application may be submitted to Technology Center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Art Unit: 2811

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to ***Hung Vu*** whose telephone number is **(703) 308-4079**. The Examiner is in the Office generally between the hours of 7:00 AM to 5:30 PM (Eastern Standard Time) Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***Tom Thomas***, can be reached on **(703) 308-2772**.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **(703) 308-0956**.

Vu

July 12, 2001

Steven Loke  
Primary Examiner

